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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,571	07/31/2003	Chieh-Po Chen	10676-US-PA	1570

31561 7590 04/20/2005

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

NGUYEN, THANH NHAN P

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/604,571	Applicant(s) CHEN ET AL. (SM)	
	Examiner (Nancy) Thanh-Nhan P. Nguyen	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment dated 1/17/2005.
2. Claims 2 and 10 have been cancelled.

Claims 1, 3-9, and 11-14 are presented for examination.

Claim Rejections - 35 USC § 102

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-6, 8-9, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Yi et al U.S. Patent Application Publication No. 2003/0063238.

Referring to claim 1, Yi et al discloses a structure of color filter, comprising: a substrate (111); a black matrix (114), disposed over the substrate, wherein the BM includes grid regions exposing the substrate; and a plurality of color film layers (112a, 112b, 112c), disposed within the grid regions, wherein a width a of an overlapping region between the color film layers and the black matrix is 0 microns, wherein a thickness of the color film layers is equal to a thickness of the black matrix, and a thickness b of the color film layers at the overlapping region is 0 microns, [see fig. 6D].

Referring to claim 3, Yi et al discloses the substrate is a transparent substrate, [see par. 0049].

Referring to claim 4, Yi et al discloses the black matrix includes light shielding resin, [see figs. 6B & 6C].

Referring to claim 5, Yi et al discloses the black matrix includes Cr metal, [see par. 0014].

Referring to claim 6, Yi et al discloses color film layers comprise red film layers (112a), green film layers (112b), and blue film layers (112c), [see fig. 6D].

Referring to claim 8, Yi et al discloses a common electrode (116), directly disposed on the BM and the color film layers, [see fig. 6D].

Referring to claim 9, Yi et al discloses the common electrode includes indium tin oxide, [see par. 0041].

Claim 11 is met the discussion regarding claims 1 and 8 rejection above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yi et al in view of Nakano et al U.S. Patent No. 5,664,982.

Referring to claims 7, and 12-14, Yi et al lacks disclosure of the red film layers, the green film layers, and the blue film layers are arranged into a mosaic type, stripe type, four pixel type or triangle type.

However, mosaic, stripe, triangle, and four pixel arrangement were well known as conventional color arrangement schemes for color filters, and evidenced by Nakano et al, for the benefit of providing sufficient color display for characters and figures (stripe color arrangement), [see col. 1, lines 42-43]; and for the benefit of realizing the effective performance of the hue in the color display and thereby producing clearer pictures (color arrangement other than stripe), [see col. 1, lines 36-38]. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have the red film layers, the green film layers, and the blue film layers are arranged into a stripe type for the benefit of providing sufficient color display for characters and figures; or to have the red film layers, the green film layers, and the blue film layers are arranged into a mosaic type, four pixel type or triangle type for the benefit of realizing the effective performance of the hue in the color display and thereby producing clearer pictures.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yi et al U.S. Patent Application Publication No. 2003/0063238 discloses a color filter comprising a black matrix, and a plurality of color film layers, wherein a thickness

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of the color film layers is equal to a thickness of the black matrix, a width a of an overlapping region between the color film layers and the black matrix is 0 microns, and a thickness b of the color film layers at the overlapping region is 0 microns.

Nakano et al U.S. Patent No. 5,664,982 discloses the red film layers, the green film layers, and the blue film layers are arranged into a mosaic type, stripe type, four pixel type or triangle type.

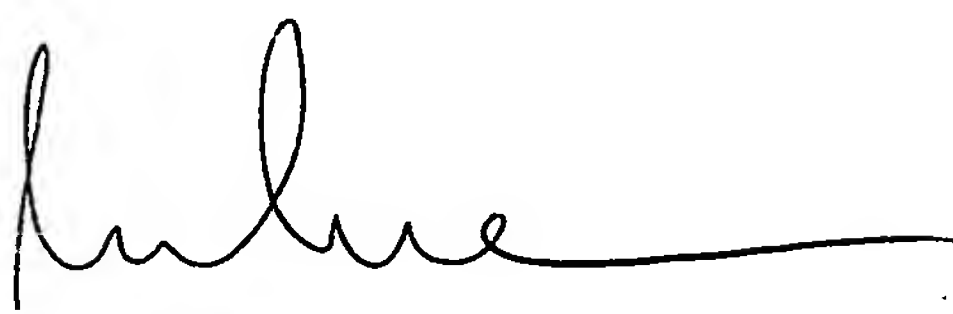
Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Nancy) Thanh-Nhan P. Nguyen whose telephone number is 571-272-1673. The examiner can normally be reached on M-F/9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 18, 2005

TN



DUNG T. NGUYEN
PRIMARY EXAMINER